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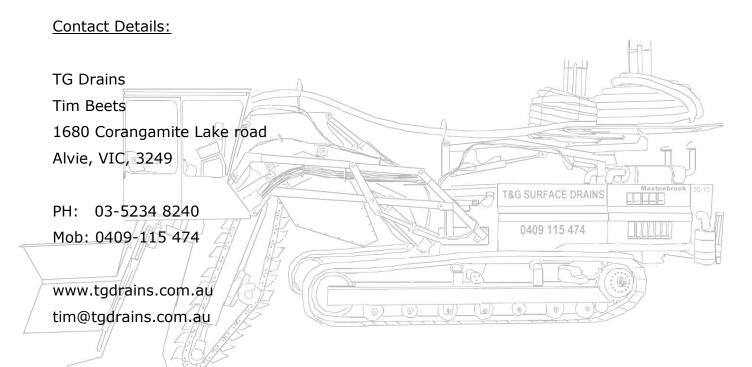
SPORTSFIELD DRAINAGE CONTRACTORS



TG Drains is a subsurface drainage company founded by Tim and Gea Beets in 1997. After having worked for an Australian drainage contractor for 5 years, they decided to start their own business and imported an Italian rotary ditcher.

Initially just concentrating on digging open drains the company soon expanded to include mole drainage and open drains dug with a "V" shaped bucket on their excavator.

In 2005 they built their own tracked tractor. Initially to work the rotary ditcher, this machine was later converted into a subsurface drainage machine. In 2009 they imported a purpose built subsurface drainage machine, a Mastenbroek 20/15 from England to expand their drainage business. In 2011 they imported a smaller Mastenbroek machine, a 15/15 with a sports field kit, to be able to branch out into the sports field side of drainage as well as the agricultural side and are now able to offer the full range of drainage solutions.



## **SPORTSFIELD DRAINAGE**

One of the most important aspects for natural grass sports field construction is designing the field for maximum drainage to remove excess moisture from rainfall prior to and/or during an event. If fields are constructed without any type of underground drainage system and they do not have an adequate crown to remove excess moisture from the field rapidly, the topsoil on the field becomes saturated and the water will do one of two things, pond or run-off. In most cases, the water starts ponding because there is little or no crown on the field. Playing games when the soil is saturated will cause severe damage to the field and will increase the amount of soil compaction, which will only make the drainage problem within the field worse.

The drainage machine used for installing sportsfield drainage is our Mastenbroek 15/15 laser controlled purpose built drainage machine with a side discharge conveyor belt. The digging chain of the machine cuts a trench on the design grade and the drainage pipe is laid with a aggregate filter in one single operation. The Mastenbroek machine is able to lay either 100mm or 160mm flexi pipe.

A tractor hauling a gravel trailer equipped with a conveyor belt drives alongside the Mastenbroek machine to deliver a continuous flow of clean, fine gravel into the machine's hopper. This avoids slumping of the trench walls and prevents excavated material falling on the pipe and possibly blocking the drainage slots. The elevation of the gravel hopper at the back of the Mastenbroek machine can be altered hydraulically, allowing the thickness of the permeable gravel backfill to be varied.

The excavated soil is thrown onto a side conveyor for easy discharge into a tipper driving alongside the drainage machine. This ensures that playing surfaces stay free of spoils and are disrupted as little as possible.







Drainage installation on 2 newly constructed ovals at Woodlands Water Reserve, Mernda.







Morshead Park Stadium, Ballarat



Woodend Reserve, Woodend



C.E. Brown Reserve, Ballarat





The Knox School, Wantirna South





Clyde Recreation Reserve, Clyde

## **SAND SLIT DRAINAGE**

A slit drainage system works by allowing a direct route for water intercepted at the surface to be channelled into an underlying pipe drainage system, thereby bypassing the bulk soil. What makes a slit drainage system so attractive is that it offers improved interception of surface water as an excellent alternative to fullscale reconstruction or amendment of the existing soil profile

A sand slit drainage system can be installed as part of a new field construction project, existing field renovation or over the top of an existing grass field. All trench spoils are conveyed directly into a tipper and hauled off site.

The equipment used to backfill the trenches are done with specialised trench sandfill equipment and hoppers.

TG Drains installs sand slit drainage using their AFT55 Wizz Wheel. The Wizz Wheel allows for high speed trenching and can dig slits from 50 to 125mm wide. Twin grass cutting discs create a perfect trench finish.

Alternatively the Wizz Wheel can also be used to install 50mm or a 65mm flexi pipe in a 85mm trench. The narrower trench allows grass to cover the trench faster.









## **SAND BACKFILLING**

When upgrading or installing drainage at an existing oval, without the project undergoing a total reconstruction, the installed drains will have a backfill with aggregate to the required height and are then backfilled with turfsand to the surface.

Sandslits also need to be backfilled with turfsand after they are installed

The turfsand is installed using our sand filler pictured below.

The spring loaded wheels of the sand filler ensure the sand is compacted in the trench, with a final roller smoothing the top and giving it a second compaction.

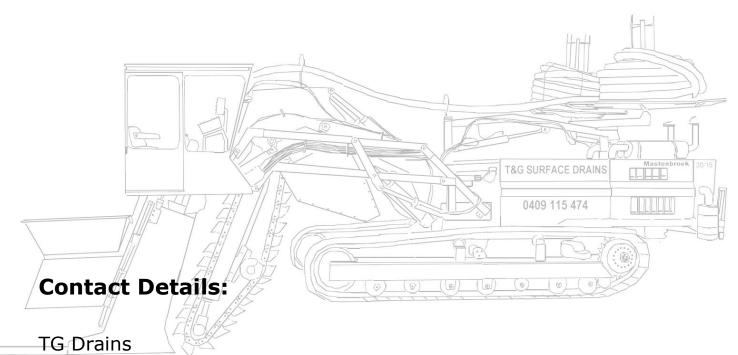








For further information or request a quote please feel free to contact Tim Beets on 0409-115 474 or visit our website at www.tgdrains.com.au



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